

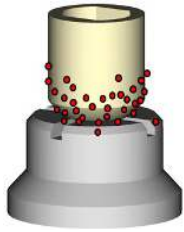
# SSK 01

## *Oxygen probe for Carburizing processes*

- Robust reliable oxygen probe also for most difficult applications like high temperatures and high carbon levels
- consistently modular design
- Maintenance by the manufacturer but also by the user self possible
- low cost of ownership based on long lifespan
- mechanical cleaning mechanism to minimize drift and increase the life time between maintenance
- Supplied with test certificate for both new probe and probe after maintenance
- Protective tube in metallic and ceramic version (especially for high operating temperatures at horizontal installation situation)
- In different lengths between 400 mm and 2000 mm available
- Easy exchange through various industry-typical Connectors

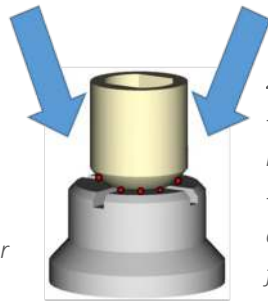


## Mechanical cleaning mechanism



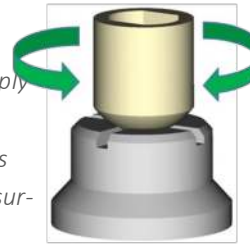
### 1. Initial state

- Soot deposits at the probe tip
- Contact problems
- Measurement error



### 2. Probe purging

- Burning of soot by supplying purge air
- some lasting Impurities directly at the contact surface



### 3. Mechanical cleaning

- Eliminate of the remaining Impurities directly at the contact surface

This mechanism minimizes probe drift and extends life between probe maintenance.

## Function

The probe is characterized by robustness, reliability, longevity and modular design. It is therefore suitable for the measurement of furnace atmospheres at high temperatures and high carbon levels. The measured probe voltage EMK corresponds to the Nernst voltage and can be converted into a carbon level using an evaluation electronic instrument.

## Probe test and test protocol

Each probe is tested before delivery in a test furnace under a test atmosphere based on a temperature measurement. The exam includes a function test and a quantitative check to determine:

- Deviation in the probe signal
  - Impedance of the probe (state of the zirconia tip)
  - Deviation in temperature
  - Response to missing reference air (tightness)
- The probe is delivered with test report.

## Repairs and spare parts

The maintenance of the probe can be done by the manufacturer but also by the user himself. All parts are also available as spare parts.

## Model selection

SSK 01 -	XX -	XXXX -	X -	X -	XXX -	XX	
							<b>Hose connections</b> N3 = Hose nipple with hose inner diameter 3 mm
							<b>Connectors</b> STD = 2 x Lemo S3 connectors ME1 = 2 x DIN connector MM1 = 1 x XLR ECZ = 1 x Lemo
							<b>Motor for mechanical cleaning mechanism</b> M = with probe motor O = without probe motor
							<b>Thermocouple type</b> S = thermocouple type S K = thermocouple type K N = thermocouple type N 0 = no thermocouple
							<b>Nominal length in mm</b> 0400, 0500, 0540, 0600, 0700, 0800 0900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000
							<b>Version</b> M1 = metallic protection tube / connection G1 " M3 = metallic protection tube / connection G3 / 4 " K1 = ceramic protection tube / connection G1 "

