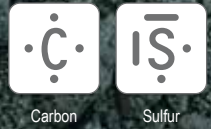


C, S determination in coke samples



Suitable analyzers

- CS-580 series
- CS-2000 (resistance furnace)

Used accessories

- Disposable porcelain boats (90160)
- Suitable calibration material (NIST or other)

Settings

- Furnace temperature: 1350 °C
- Comparator level: 20 mV
- Minimum analysis time: 60 sec
- Maximum analysis time: 180 sec



Resistance furnace



Sample preparation

For best results grind the sample down to a particle size of approx. 200 µm. Dry the sample to constant mass at 105°C (at least 1 hour).

Procedure

- Prepare and clean the ELTRA analyzer (e.g. exchange anhydron, sodium hydroxide) and set the furnace temperature to 1350 °C
- Run at least three warm up samples (e.g. ELTRA 92511-3020) with a medium sample weight of 200 mg until the results are consistent
- Calibrate the system with a suitable calibration material (NIST or other):
 - (1) Weigh in 200 mg of sample in a porcelain boat (90160)
 - (2) Start analysis (F5 Button)
 - (3) Load the sample into the furnace and wait until the PC calculates results

Repeat Step (1) – (3) at least three times;
Mark the results and use the calibration function in the software

-> **Now start with the actual analysis.**

Typical results	
Coke (customer sample)	
% C	% S
87.12	0.74
86.53	0.75
86.77	0.76
87.53	0.76
87.05	0.77
87.03	0.77
86.53	0.77
86.95	0.75
87.59	0.76
87.35	0.75
Average values	
87.05	0.76
Deviation	
0.372	0.010