



C, H, S determination in wood samples

Suitable analyzers

CHS-580 series

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 μ m. Dry the sample to constant mass at 105 °C (at least 1 hour).

Procedure

- Prepare and clean the ELTRA analyzer (e.g. exchange anhydrone, 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 150 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.
Please introduce the wood samples slowly into the analyzer.

Typical results		
Wood chips		
% C	% H	%S
49.72	6.28	0.022
49.72	6.31	0.022
49.68	6.24	0.019
49.95	6.31	0.019
49.49	6.26	0.018
49.99	6.24	0.020
49.59	6.28	0.020
49.33	6.25	0.021
50.01	6.24	0.020
49.75	6.21	0.020
Average values		
49.72	6.266	0.020
Deviation		
0.220 / 0.44 %	0.032 / 0.51 %	0.001 / 5.96 %