

# Operation Instruction

1. Switch on heating power and power switch of infrared sulfur analyzer in sequence. Then turn on computer and printer.
2. Run analysis program and click Setting, check if parameters are in compliance with analysis requirements. Set high temperature furnace to 1300 °C and thermostatic chamber to 48°C, it starts to heat.
3. Check if reagent used for drying is effective. If not, replace it immediately.
4. Turn on oxygen cylinder and adjust regulator to (0.25±0.01) MPa. Switch on oxygen purging and vacuum pump. Adjust oxygen flow meter to (4.0±0.01) L/min and pumping flow meter to (3.0±0.1) L/min. Then turn off oxygen purging and vacuum pump.
5. Remove residue in sample boat and weigh samples. Each analysis sample is required to be (300±10) mg, record sample mass and moisture content. Spray sample evenly on sample boat. Do not pile up samples in the same location.
6. After weighing all samples, click Start Analysis, it comes to operation menu. Click Add samples, the first two samples defaults to waste samples. Then input sample number, mass, moisture and other related information about sample.
7. After high temperature furnace and thermostatic chamber heat to setup temperature (about 30min) and keep it for over 1h, start the analysis.
8. Load sample boat on chain wheel from right to left and inside and out. Analysis sequence for samples should be consistent with sample name, mass and moisture on analysis dialog box.

9. When furnace temperature heats to 1300°C and IR voltage keeps within 10mV in 150s, start the analysis. Sample feeding, combustion, analysis and sample unloading will be finished automatically.
10. For more sample analysis, repeat the above steps.
11. When all analysis samples are complete, set report format according to actual needs. Print analysis data and click Exit.
12. Turn off oxygen cylinder and click Diagnostics on Function menu. Set high temp. furnace and thermostatic chamber to 0°C. Exit analysis program, then switch off computer and printer. When temperature in furnace drops below 500°C, turn off analyzer and main power switch.