

## Maintenance

1. Drying pipe: We need to change the silica gel in the drying pipe if 2/3 of the blue silica gel changes its color into light. The silica gel can use for recycle, just dry it in the drying oven to get rid of the moisture.
2. Electrolytic cell: Usually, the electrolytic plate should clean after every 200 samples, use cotton with alcohol to brush it, together sink the sieve into alcohol to dissolve the dirty parts in case of block. How to keep the electrolytic solution is very important, we need a dark bottle and avoid of straight sun light. If the color of the solution is dark, we use high sulfur coal sample to keep the balance, also we can prepare the solution once again.
3. Gas circuit: Before we doing analysis, we should check the leakage of the instrument. To check the leakage of the instrument, you should adjust the inlet pump, make sure the blow flow is 1.0L/min (indicated by flowmeter), then turn off the Two-port Valve, observe the reaction of flowmeter, if the buoy lower down less than 300mL/min, it means the instrument is seal, otherwise, check the connecting parts of the instrument (including combustion tube, rubber). If the asbestos between the connection parts turns black, we need to change it, too.
4. Heating element: To check the conductivity of the heating element, the resistance of the heating element get higher and higher as time goes by, we need to adjust the voltage. The upper limit is 150V, and reach the setting temperature within 45min, otherwise, replace the heating element.
5. Thermocouple: We judge the thermocouple is normal or not by temperature indicating and testing. First, we

can rely on the room temperature before we doing analysis, then, we can use standard thermocouple to calibrate (we have already done before we set out the instrument).