

## Pre-installation Checklist

### Conditions for installation:

1. The ambient temperature:  $5^{\circ}\text{C} - 35^{\circ}\text{C}$ , and the relative humidity:  $\leq 85\%$ .
2. The laboratory should be free of violent vibration, airflow, strong electromagnetism and corrosive gases.
3. Equip the laboratory with proper work surface:  $700\text{ mm(W)} \times 2500\text{ mm(L)} \times 600\text{ mm(H)}$ .
4. Equip the laboratory with stable power supply of  $220\text{ V} \pm 22\text{ V} / 50 \pm 1\text{ Hz}$  (grounded well). Two groups of power supply in different phases: Controlling power  $\geq 1\text{ kW}$ , and heating power  $\leq 4\text{ kW}$ . Reserve locations for one air switch and one three-core socket (20A, 220V).

### Preparation:

1. Equip the laboratory with oxygen supply (cylinder pressure:  $> 3\text{ MPa}$ , purity:  $> 99.995\%$ ). Do not use any electrolytic oxygen. pressure  $0.25\text{ MPa} \pm 10\%$

2. Power gas: Nitrogen or compressed air, without oil or water (Cylinder Pressure: >3 MPa), pressure 0.25 MPa  $\pm$  10%
  
3. Helium: Purity > 99.99%, pressure 0.25 MPa  $\pm$  10%
  
4. Please confirm connectors of the cylinder are consistent with Chinese standard (G5/8"-RHF) (the screw thread is on the outside) to make it match with the reducing valve the instrument equipped with, if not, please prepare the reducing valve (gauge for cylinder is 0-25 MPa, gauge for outlet is 0-1 MPa) by yourself.
  
5. A electric balance with a resolution of 0.1 mg.
  
6. One kind of coal standard sample (e.g., 7j) or EDTA
  
7. One desiccator.