

QUOTATION: Kairos Power

Attention: Sakkie Vlok



PLC system



Graphite chamber



Tungsten-rhenium and infrared thermocouple








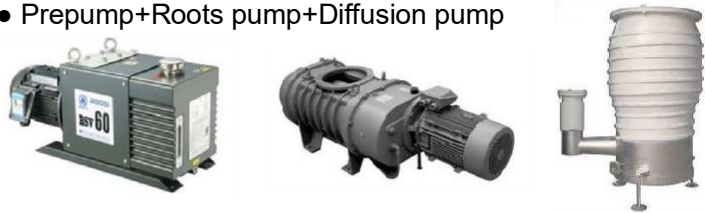

**I. Furnace body**

Inside Chamber Size	200(W)x200(H)x300(D)mm
Maximum Temperature	2200°C
Working Temperature	0-2000°C
Furnace Structure	<ul style="list-style-type: none"> <li>• Double layers carbon steel casing with water cooling system to ensure the surface below 30°C</li> <li>• Furnace door inside is polished stainless steel</li> </ul>
Furnace Shell	High intensity carbon steel with electrostatic spraying

There is a complete furnace shell production in our factory, including plate cutting, welding, polishing and painting.



<p>Heating Element</p>	<ul style="list-style-type: none"> <li>• Graphite heating element</li> </ul> 
<p>Furnace Chamber</p>	<ul style="list-style-type: none"> <li>• Pure graphite chamber: Hard felt + soft felt</li> </ul> 
<p>Working Voltage</p>	<p>380V 50HZ 3P</p>
<p>Rated Power</p>	<p>50kW</p>
<p><b>II. Temperature control system</b></p>	
<p>Temperature Accuracy</p>	<p>+/- 1°C</p>
<p>Heating Rate</p>	<p>&lt; 20°C/min</p>
<p>Temperature Alarm</p>	<ul style="list-style-type: none"> <li>• Over temperature alarm</li> <li>• Broken thermocouple alarm</li> </ul>
<p>Touch Screen (10 inch)</p> 	<ul style="list-style-type: none"> <li>• PLC full-automatic control, also can be operated by workers.</li> <li>• PID automatic control via SCR (Silicon Controlled Rectifier) power control with phase angle fired, current limiting resistor.</li> <li>• 50 programmable segments for precise control of heating rate, cooling rate and dwell time.</li> <li>• Built in PID Auto-Tune function with overheating &amp; broken thermocouple broken protection.</li> <li>• Over temperature protection and alarm allows for operation without attendant.</li> <li>• Data export by USB disk</li> </ul>
<p>Thermocouple: Tungsten-rhenium and infrared thermocouple</p>	

<b>III. Vacuum system</b>	
Maximum Vacuum	<b>10<sup>-3</sup> Pa (10<sup>-5</sup> mbar)</b>
Vacuum Tank	<ul style="list-style-type: none"> <li>• Double layer water cooling carbon steel</li> <li>• Silicone sealing device</li> <li>• Hand wheel locking device</li> <li>• Maximum positive pressure for atmosphere 0.4bar</li> <li>• Pneumatic valves with cylinder</li> <li>• Front and rear door design is easy for maintenance</li> </ul> 
Vacuum pump	<ul style="list-style-type: none"> <li>• Prepump+Roots pump+Diffusion pump</li> </ul> 
Vacuum gauge	Pirani gauge + Ionization gauge 
<b>IV. Price and other term</b>	
Quantity	1 unit
Validity	15 days
Price	R 1 480 000-00 complete, graphite furnace and water cooling system
Payment terms	75% on order; balance strictly 30 days
Delivery time	12 – 15 Weeks
Certification	CE certificate
Warranty	One year
<b>V. Free accessories</b>	
Crucible clamp, Gloves, Manual	

**Positioning and power requirements customer responsibility. Commissioning included**