

## Appendix-I

Sr.No.	Name of the item with Specifications	Qty.
1	<p style="text-align: center;"><b>Electric Furnace with atmosphere control</b></p> <ol style="list-style-type: none"> <li>1. Insulated-gate bipolar transistor (IGBT) based Induction Heater working 415 Volts, 3Phase power supply of 18Amperes current capacity.</li> <li>2. The unit will be rated for 10kW at 20 kHz frequency.</li> <li>3. Features include- MCB at the input, Overload protection, Current Limit, Surge protection with snubber circuit, Over temperature protection, Cooling system interlock with pressure and temperature,</li> <li>4. The system will have following indications:-Overload trip, Cooling System Failure trip,</li> <li>5. The Panel meters provided will indicate DC Voltage and DC current</li> <li>6. Push button Station to start and to stop the heating. If not, the heating will switch OFF automatically after the set time on the timer in the unit. In Auto mode the Power will get adjusted depending on PID Temperature Controller feedback.</li> <li>7. An Impedance matching transformer.</li> <li>8. Special type heating inductor</li> <li>9. The chamber to be made with non-magnetic (Seamless stainless steel pipe) stainless steel and should enclose, copper inductor, crucible (minimum 1.5 kg steel capacity), valve for atmospheric gas. As attached in fig.</li> <li>10. 1TR Chiller with Recirculating pump, Cooling Water Recirculating Unit to provide 10LPM at 2.00kg/Sq cm.</li> </ol> <p><b>Accessories:</b></p> <ul style="list-style-type: none"> <li>● Thermocouple qty: 5 Nos.</li> </ul>	1 Unit