Packaged Steam Boilers - Specifications

1.0 Scope

Supply an electrically heated steam boiler complete with standard equipment and options as indicated in the following specification.

2.0 General

2.1 The boiler shall be the electric resistance type VSB/VHSB/HSB as manufactured by CCI Thermal Technologies Inc.2.2 The boiler shall be constructed to the latest edition of the ASME code with the design registered

in_____

3.0 Capacity

- 3.1 The minimum boiler output shall be _____ lbs/hr of steam from and at 100°C (212°F).
- 3.2 The boiler shall be rated at _____ volts, _____ phase, _____ kW, _____ HZ.
- **3.3** The boiler vessel shall be designed for an operating pressure of _____ psig (kPa) maximum.

4.0 Controls

- **4.1** The boiler shall be fully equipped with all electrical and mechanical controls so that it is complete and ready to operate.
- **4.2** Standard mechanical components provided shall include a pressure gauge with isolating stopcock, sight glass assembly, check valved on inlet, blowdown valve(s) as required, pressure controller(s), high pressure controller, and pressure relief valve(s).
- **4.3** Standard electrical components provided shall include a control circuit ON/OFF switch, fused control transformer, fused magnetic contactors derated to a maximum of 90% of their rated capacity, electronic low water controller, electronic feed water controller, pilot lights for *"Power ON", "Heat ON", "Lower Water"*, and *"High Pressure"*, and connection lugs for incoming power supply.
- **4.4** In addition to the standard components itemized in articles 4.2 and 4.3, the boiler shall come equipped with the following optional features: (specify see pages E19 and E20 for options)

5.0 Flange Heaters

- 5.1 The boiler shall be equipped with flanged immersion heaters as manufactured by CCI Thermal Technologies Inc.
- 5.2 The flange heaters shall be Incoloy® sheathed and of low watt density.
- **5.3 (For VSB Only)** The flange heaters shall be mounted vertically through the top of the vessel so as to minimize the build-up of solids on the heating elements.

6.0 Enclosure

- **6.1** The steam boiler shall be equipped with a full structural steel base supporting the vessel, control panel and sheet metal enclosure.
- 6.2 The entire enclosure shall be finished with a baked on epoxy finish (ASA-61 gray).
- **6.3** The boiler dimensions shall be approximately _____ high x _____ wide x _____ deep.

Specifications

