

**Shell and Tube Heat Exchanger  
Suggested Specification****1. CODE REQUIREMENTS**

- A.** The Shell and Tube Heat Exchanger(s), its installation, and all equipment associated with the operation of the unit(s) shall comply with all applicable codes. The Contractor is cautioned that all aspects of the installation shall meet the requirement of: ASME latest revision and Local Authorities Code.
- B.** The installation and any modifications shall be in accordance with the practices recommended by the American Society of Heating, Refrigeration, and Air Conditioning Engineers.
- C.** Unit(s) shall be ASME code constructed and stamped in accordance with Section VIII, Division 1.
- D.** Unit(s) shall be registered with the National Board of Boiler and Pressure Vessel Inspectors, and signed copy of shop inspection report shall be furnished.

**2. MANUFACTURER AND MODEL**

- A.** The heat exchanger(s) shall be The Alstom Corporation model \_\_\_\_\_.

**3. MATERIALS**

- A.** Tubes: \_\_\_\_\_
- B.** Tubesheet: \_\_\_\_\_
- C.** Head: \_\_\_\_\_
- D.** Head Gasket: \_\_\_\_\_
- E.** Shell: \_\_\_\_\_

**4. CAPACITY**

- A.** To heat \_\_\_\_\_ GPM of \_\_\_\_\_ in the tubes from \_\_\_\_\_ Deg. F to \_\_\_\_\_ Deg. F using \_\_\_\_\_ of \_\_\_\_\_ at \_\_\_\_\_ Deg. F and \_\_\_\_\_ PSIG.

**5. GENERAL DESIGN AND CONSTRUCTION**

- A.** Each heat exchanger is to be designed, built, and tested in accordance with the ASME Boiler and Pressure vessel code, section VIII, Division 1.

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- B.** A manufacturer's data report for pressure vessels, form number U-1 or a manufacturer's certificate of compliance form number U-3 as required by the provisions of the ASME code rules is to be furnished to the user or designated agent upon request.
- C.** This form must be signed by a qualified inspector, holding a National Board commission when required, certifying that construction conforms to the latest ASME Code for pressure vessels for a tube side working pressure of \_\_\_\_\_ PSI at \_\_\_\_\_ Deg. F, and, a shell side working pressure of \_\_\_\_\_ PSI at \_\_\_\_\_ Deg. F.

### 6. OPERATING CONDITIONS

- A.** The tube side pressure drop shall be no more than \_\_\_\_\_ PSI.
- B.** The maximum bundle length shall be no more than \_\_\_\_\_ Ft.
- C.** The heat exchanger(s) shall be capable of providing a heat load of no less than \_\_\_\_\_ Btu/Hr.
- D.** Each heat exchanger shall contain a tube heating surface of no less than \_\_\_\_\_ Sq.Ft.

### 7. QUALITY ASSURANCE

- A.** All equipment or components of this specification section shall meet or exceed the requirements and quality of the items herein specified, or as denoted on the drawings.
- B.** Ensure equipment pressure ratings are at least equal to system's maximum operating pressure at point where installed, but not less than specified.
- C.** Equipment manufacturer shall be a company specializing in manufacture, assembly, and field performance of provided equipment with a minimum of 45 years experience.