

## **Plate Heat Exchanger Specification**

ASME® Code Rated Fluid-to-Fluid Heat Exchanger

## Unit Identification Number:

Process:

The heat exchanger shall be of the bolted gasket/plate-and-frame type, with gaskets, designed for the following duty:

	Hot Side	Cold Side
Circuit Name		
Fluid Type (water, water/glycol mix, etc.)		
Flow Rates (gpm or lb/hr)		
Entering Temperature (°F)		
Leaving Temperature (°F)		
Maximum Pressure Drop (psig)		
Operating Pressure (psig)		

**DESIGN PRESSURE:** The plate heat exchanger shall be designed, fabricated, and tested in accordance with the requirements of Section VIII, Division 1, of the ASME Code. The exchanger shall be code stamped for \_\_\_\_\_\_ psig design pressure at the maximum ( \_\_\_\_\_\_\_ °F) and minimum ( \_\_\_\_\_\_\_ °F) fluid temperatures specified. The test pressure will be 130% of the design pressure. The exchanger shall be designed to withstand full design pressure in one circuit with zero pressure in the opposite circuit.

DESIGN REQUIREMENTS: The heat exchanger performance, in clean condition, shall be in accordance with ARI 400-2001.

**PLATES:** Plates shall be fabricated of \_\_\_\_\_\_ material (Type 304 or 316 stainless, or other), with a minimum plate thickness of 0.5 mm (nominal).

GASKETS: Gaskets shall be Nitrile Butadiene Rubber (NBR) or other material (\_\_\_\_\_\_) as specified by the user.

**CONNECTIONS:** All inlet and outlet connections shall be designed to accept either ANSI flanged or IPS threaded connections, depending upon size or specific needs. Studded port connections shall be lined with metal or the same elastomer as provided on the plates.

**FRAME:** Fixed and movable end frames shall each be constructed as to eliminate any need for adding stiffeners to provide reinforcement for less frame thickness. Material of construction is SA-516 or SA-515-70. The frame assembly shall be coated with corrosion-resistant polyurethane paint.

COMPRESSION BOLTS: Compression bolts, nuts, and washers shall be zinc-plated, low alloy steel (SA-193-B7/SA-194-2H).

**EXPANSION:** The exchanger shall have frame capacity for future installation of a minimum of twenty (20) percent additional plates.

**PLATE HANGER:** Plates shall be of one-piece design, without need of loose removable plate hanger components. The plates shall be supported by a Type 304 stainless steel plate hanger. The heat exchanger shall have a plate- positioning system that will prevent shifting during tightening of the plate pack and during unit operation.

SHROUD: The top and sides of the plate pack shall be entirely enclosed within a protective shroud.

DIMENSIONS: The exchanger shall not exceed \_\_\_\_\_ (inches) height, \_\_\_\_\_ (inches) width, and \_\_\_\_ (inches) length.