SPECIFICATION FOR PLATE HEAT EXCHANGER
(PROJECT STANDARDS AND SPECIFICATIONS)

TABLE OF CONTENTS

1. GENERAL  2
   1.1 Scope  2
   1.2 References  2
   1.3 Specifications  3
   1.4 Definitions  3
   1.5 Nomenclature  4
   1.6 Conflicting Requirements  6
   1.7 Proposals  6

2. DESIGN  7
   2.1 General  7
   2.2 Thermal Design  8
   2.3 Corrosion Allowance  9
   2.4 Materials  9

3. DETAIL DESIGN  10
   3.1 General  10
   3.2 Plate  11
   3.3 Fixed and Movable Covers  12
   3.4 Top Carrying Bar  13
   3.5 Compression Bolts and Nuts  13
   3.6 Supports  14
   3.7 Plate Gaskets  14
   3.8 Nozzles and Other Connections  16

4. FABRICATION  18
   4.1 General  18
1. GENERAL

1.1 Scope

1.1.1 This specification covers the basic requirements for the design, materials, fabrication, inspection and testing of plate and frame heat exchangers.

1.2 References

1.2.1 The following standards and publications are referred to herein:

1) As covered in this Specification for painting and welding for heat exchangers.

2) ASME (American Society of Mechanical Engineers) publications:
   a. Section II, Material Specifications
   b. Section VIII, Division 1, Pressure Vessels
   c. Section IX, Welding and Brazing Qualifications

3) ANSI Standards
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1.3 Definitions

1.3.1 Exchanger Unit: One or more plate and frame heat exchanger for a specified service.

1.3.2 Item Number: OWNER identification number for and exchanger unit.

1.3.3 Effective heat Transfer Area: The area of the plate which is in contact with both fluids.

1.3.4 Plate and Frame Heat Exchanger (PFHE): The assembly of gasketed plates supported in one frame.

1.3.5 Frame: The assembly that provides the structural support and the pressure containment for the plate pack.

1.3.6 Connector Plate: Plate used to separate 2 or more services in on FHE.
1.4 Nomenclature

1.4.1 Refer to Figure 1 for typical components of a plate and frame heat exchanger.

1) plate  
2) Plate pack  
3) Fixed cover  
4) End support  
5) Movable Cover  
6) Compressor bolt  
7) Bottom bar  
8) Port  
9) Top Carrying bar

FIGURE 1: TYPICAL COMPONENTS OF A PLATE HEAT EXCHANGER