Brazed Plate Heat

Exchanger

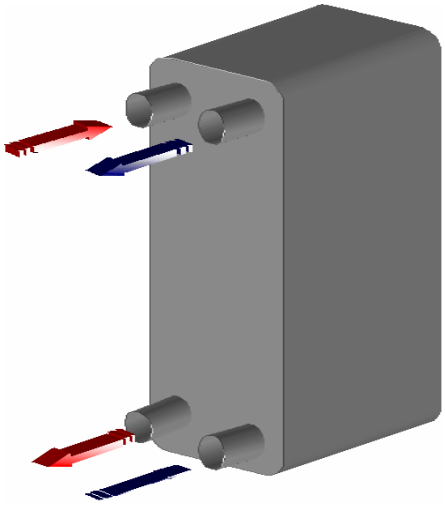
Operating and Instruction Manual

Unit type:
Serial Number:
Client:
Project:
Engineers:
Order Number.

Installation

1. Mounting/support unit:

   a) On a shelf
   b) By brackets, straps or feet
   c) By using the pipe work
   d) Angle bracket extra equipment and order
   e) Liquids must be suitable for the brazed plate heat exchangers



Avoid drilling through any part of the exchanger

Connecting Pipework

1. **Avoid** over-tightening unions onto the threaded connections. **Excessive force** will shear the connection braze. The threads are parallel. Seal unions by use of an O-ring or a round gasket located at the end of the connection, or seal the threads by use of tape.

2. The use of **flexible pipe work** is strongly recommended. Vibrations from the pipe work, and control valves must not be transferred to the heat exchanger.

3. Ensure that there are adequate expansion/safety valves installed into the adjacent pipe work.

4. If the pipe work is to be soldered into the nozzles on the exchanger, then:

   Fill the other circuit with water (circuit must be open to the atmosphere).
   Wrap a wet towel around the base of the connection to be soldered. Use solder containing no less than **45%** silver.
   On no account weld connections onto or near the exchanger.

Start Up

1. Close all insulation valves.
2. At first fill and vent coldest circuit.
3. Start circulation of cold circuit, opening insulation valves gradually.
4. Repeat with hot circuit.
5. Automatic control regulation can now be started.
6. Only open in pressure-free conditions.

Steam

Drain the steam circuit first prior to opening steam valve. This precaution helps reduce the probability of water hammer.

Water hammer and thermal shock will cause damage to the exchanger.

Shut Down Procedure

1. Close down hot circuit by **slow** adjustment of the control valve.
2. Full flow on the cold circuit should be maintained.
3. When control valve is fully closed, switch off the pump.
4. **Slowly** close down cold circuit, then switch off the pump.
5. Close all insulation valves.
6. When cool, drain unit completely.

Cleaning

1. Only chemical cleaning is possible.
2. Only use chemicals which do not attack copper and stainless steel. Consult a cleaning specialist in case of doubt.
3. Suggested cleaning fluid – 5% phosphoric acid or 5% oxalic acid circulated at **ambient** temperature, followed by large amounts of freshwater to flush.

Refrigerant

1. Insulate unit to avoid condensation freezing on plate pack outer surface, if the operating temperatures are low.

2. Quick acting controls are best suited for use with the brazed plate.

3. **Evaporating** applications – position the expansion valve as close as possible to the liquid connection. The valve should be of a slightly higher capacity than the unit, and should have an external pressure equalizing connection to avoid unnecessary heating. The sensor bulb located on the suction side should be well insulated away from the ambient air temperature, and should be sensitive enough to respond quickly to changes in the gas temperature.

4. **Condensing** applications – regulate/control via/on the service medium circuit.

Spare Parts

No spares are available. The heat exchanger is fully sealed.

For any further information relating to the product, contact:

AHTT Pty Ltd
4/185 Briens Road
Northmead. NSW 2152
Ph: 02 9890 7122 Fax: 02 9890-7133
www.heattransfer.com.au