

For SW1A, SW1B, SW1A+, SW1B+, B+II WaterWizard Heaters:**DRIP TRAPS:**

Most heat exchangers are subject to damage from water hammer caused when an accumulation of condensate is admitted to the heat exchanger upon opening the steam control valve. To prevent this damage, steam supply lines should be adequately drained by means of steam traps installed at intervals in the steam supply system.

Therefore, whenever there is an overhead steam main, we recommend that a drip trap be installed at the bottom of the vertical section feeding the heater, and preceding the control valve.

Float & thermostatic traps (F&T) or thermodynamic disc (TD) are recommended for drip trap applications, provided they are adequately sized and of suitable pressure standard. Specific sizing depends on piping system design, and trap capacity should be adequate to eliminate any condensate that might collect at the valve inlet. A ¾" float and thermostatic trap will handle most applications.

CONDENSATER TRAPS:

Heat exchangers of conventional design require a trap to be installed at the condensate discharge to prevent live steam from passing into the condensate system. The unique, vertical cross flow design of the AERCO helical coil heater eliminates the need for this trap in all normal domestic water heating applications, because the condensate leaving the heater is sub-cooled well below 212°F by the incoming cold water. A UNION ORIFICE AND CHECK VALVE ARE RECOMMENDED in lieu of a trap to provide some restriction to the flow of condensate.

EXCEPTIONS:

When the AERCO helical coil heater is used as a booster heater, and/or when in laundries with the 'constant volume – variable temperature' accumulator hookup, or in other applications where the incoming heater temperature is 110°F or greater, A CONDENSATE TRAP IS RECOMMENDED. In these situations a FLOAT AND THERMOSTATIC TRAP must be used. All other types are either ineffective or likely to cause damage to the heater under certain operating conditions.

The trap selected must have adequate capacity and be designed for the maximum working pressure required (line pressure).

See Engineering Manual page A701.2 for AERCO Steam Trap selection chart.