

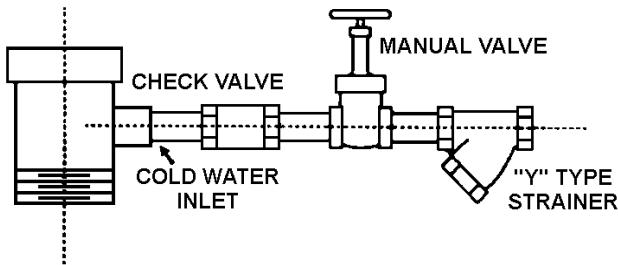
# INSTALLATION AND OPERATION INSTRUCTIONS OF PENN AFTERCOOLERS

The selected Aftercooler is screwed into the drain line after the separator. The cold water inlet (C.W.I.) coupling should then be piped to the cooling water through the valve and accessories as illustrated below. The bottom of the Aftercooler is then piped to a service drain. The drain should be steel, cast iron, or concrete of the same size or larger than the Aftercooler. Drains should be sloped a minimum of 1' per 100'. More slope or larger size should be used on obstructed or angled drains. The model A5D Manual Aftercooler is now installed and ready for use. Continue below for automatic cooling Aftercoolers.

The self actuating temperature regulating valve bulb or the solenoid valve sensing element and the bi-met thermometer stem are inserted into the bulb connections on the Aftercooler in that order. If a bulb does not fit correctly into the Aftercooler, a nipple could be added to lengthen the connection. The bulbs should protect into at least the center of the Aftercooler. Instructions also accompany the temperature regulator valve or solenoid valve. The model A16DS, A18DF, or the 20AO Automatic Aftercooler is now installed and ready for use.

The model A5D, A16DS and A18DF Aftercoolers are a non-clogging fitting since the short nozzles and high velocities prohibit deposit build up and clogging which occur at high temperatures.

Shown is the A5D Manual Aftercooler with recommended piping with manual valve and accessories.

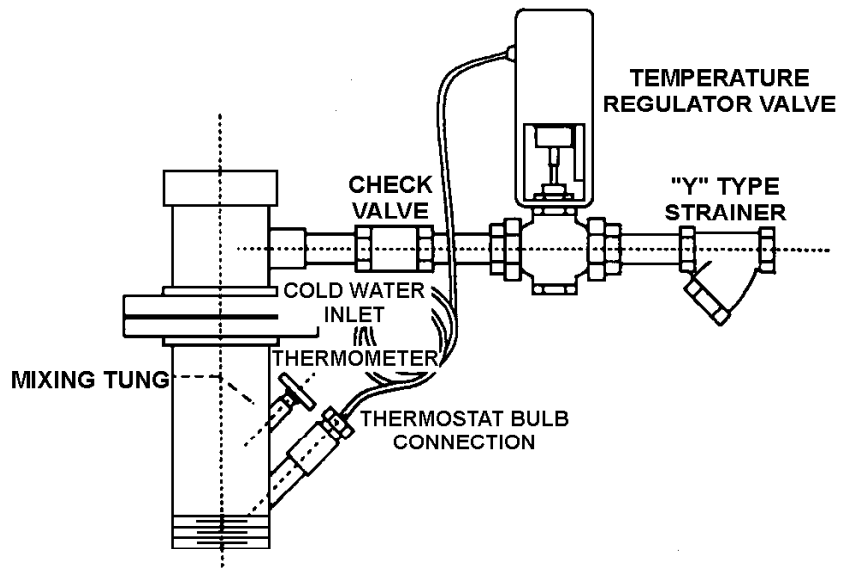


The A5D is a Manual Aftercooler. By opening the manual valve first, cooling water is added to the hot condensate stream. The check valve and strainer protect the valve. The cooling water size is determined from our selector chart B. For installations other than listed please consult the factory or representative for sizing.

Shown is the A18DF Automatic Aftercooler with recommended piping for the temperature regulator valve, piping, and accessories.

The A18DF is an Automatic Aftercooler. The self actuating valve senses the drain temperature and adds cooling water until the set temperature is met. A mixing tung is provided on 4" units and larger. The drain temperature can be continuously monitored on the bi-metal thermometer. The middle flanges permit rotation for various pipe fitting requirements and also serves as a dismantling flange.

Not shown is the 16DS Automatic Aftercooler and the 20AO spray-type Aftercooler. The 16DS Aftercooler is the same as the 18DF model without the center flanges. The 20AO Aftercooler is a jacketed-type Aftercooler required in some areas. This unit uses several cold water spray holes. It can also be used to knock down steam. The model 16DS and 20AO Aftercooler installation is the same as the 18DF model.



Warning: The surface of the Aftercooler may be hot due to the induction of hot water. Caution should be used when working around this vessel.



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